

1. GENERAL

1.1 Purpose

The Radio Services Procedural Guide (Guide) presents the DOE procedures for the planning, acquisition, and use of radiocommunication services and associated spectrum resources.

1.2 Scope

Procedures are presented to obtain spectrum certification and frequency authorizations from the Department of Commerce/National Telecommunications and Information Administration (NTIA). Spectrum certification is required prior to the expenditure of funds for the acquisition of significant terrestrial and satellite radiocommunication systems; whereas, frequency authorization is required prior to the operation of any radiocommunication system at a specific location. Electromagnetic compatibility analysis and coordination at the local, regional, and national levels are required between existing systems competing for the use of spectrum resources and new systems and operations prior to obtaining spectrum certification or frequency authorization. Frequency reviews are required every five years during the life cycle of the system or operation. Frequency deletion requests are required when an authorized frequency is no longer required. Interference reports are required if a non-DOE operation disrupts a DOE operation.

Figure 1 depicts the procedures and the responsibilities between the field entities and Headquarters for the planning, acquisition, and use of radiocommunication services and spectrum resources. Not all procedures are required for every new operation. As a minimum, system planning, frequency authorization, renewal or deletion procedures, and database maintenance are required. Strategic planning is only necessary periodically. Certification is only required when acquiring a new system that will have a major electromagnetic impact on the environment. Interference reporting is only required if interference occurs.

1.3 New Wireless Telecommunication Services

These new voice, data, messaging, imaging, and/or video wireless telecommunication services are used for the collection, transmission, detection, identification, and location of information. These services support applications such as the Department's communication, transportation, and security needs. These terrestrial and satellite services are required for increased mobility, flexibility, and portability for the transmission of information between anyone, anytime, and anywhere. Emerging wireless telecommunication services have the capability to complement and supplement or replace wired telecommunication services for in-building use as well as campus, metropolitan, mobile, nationwide, and global use. Emerging wireless telecommunication services may offer increased user productivity, enhanced information exchange between end-users, and a cost savings as compared to existing telecommunication services.

1.4 Spectrum Resources

The U.S. Treasury receives billions of dollars from auctions and fees for the use of these resources by telecommunication manufacturers, service providers, and users such as the broadcasting, transportation, and utilities industries. The Department's four businesses and corporate management also rely on radiocommunication services and spectrum resources in support of their mission, programmatic, and operational requirements. The Department is required to reimburse NTIA annually for their costs resulting from providing spectrum management services to DOE. The costs are based on the Department's share of NTIA's operating costs for the following fiscal year and the number of DOE's frequency authorizations for the current fiscal year. Therefore, maximum use of the minimum number of spectrum resources is required throughout the Department to minimize these costs.

1.5 Automation Support

Governmentwide, computer-aided information management systems support the management and use of radiocommunication services and spectrum resources to ensure efficient and cost-effective use of these valuable resources. NTIA has developed software for the Governmentwide Joint Spectrum Management System (JSMS), which is provided on CD-ROMs to the Department. The software is updated periodically on an as-required basis and will be provided to the field entities on CD-ROMs for spectrum engineering and electromagnetic compatibility purposes; the preparation of requests for spectrum certification, frequency authorization, and frequency renewal or deletion purposes; and to maintain the spectrum certification and frequency authorization databases.

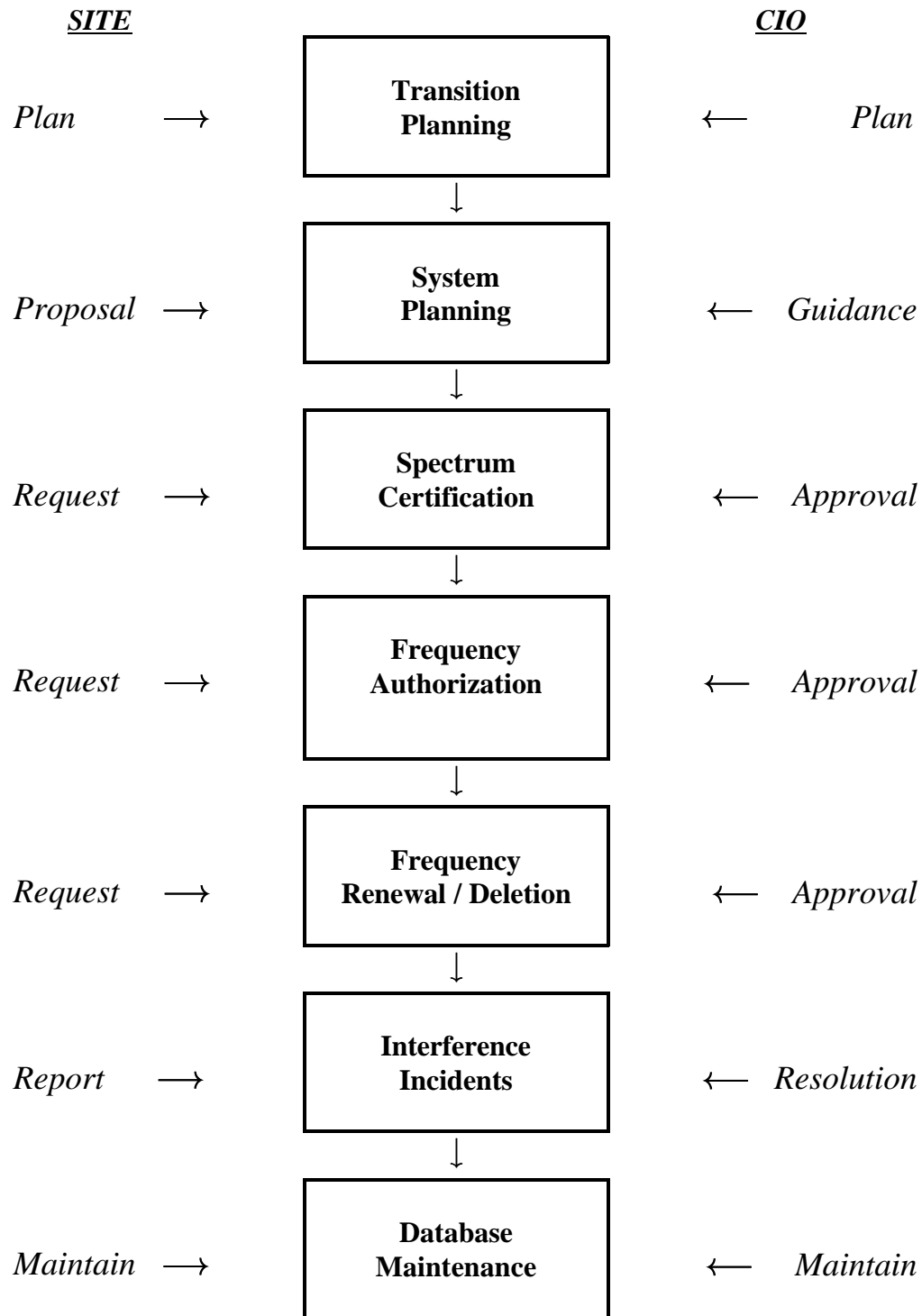


Figure 1. Radiocommunication Services and Spectrum Resources Planning, Acquisition, and Use Procedures.